

APPLICANT(S): MERON, Gavriel et al.
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AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1-23. (Cancelled)

24. (Currently Amended) A method for displaying an in vivo image stream, said method comprising:

~~displaying a plurality of frames from the in vivo image stream~~
~~substantially simultaneously;~~

comparing at least one predetermined criterion of each of a plurality of frames to a reference image;

assigning a score to each of the plurality of frames based on a degree of variation of the predetermined criterion of each frame and the reference image;

[[and]]

spatially positioning the frames in a spatial order of ascending or descending degree of variation based on the score assigned thereto; and

displaying the plurality of frames from the in vivo image stream substantially simultaneously according to the spatial positioning.

25. (Previously Presented) The method according to claim 24 comprising displaying the in vivo image stream as a multi-frame image stream.

26. (Previously Presented) The method according to claim 24 comprising adjusting a rate at which the multi-frame image stream is displayed based on the content of the frames.

27. (Cancelled)

28. (Currently Amended) The method according to claim 24 wherein the score is assigned based on a degree of color variation ~~between~~ of the displayed images as compared to the reference image.

29. – 30. (Cancelled)

31. (Previously Presented) The method according to claim 24 comprising adjusting the size of at least one of the frames displayed based on the assigned scores.

32. (Previously Presented) The method according to claim 24 wherein the in vivo image stream includes frames captured from more than one image sensor.

33. (Previously Presented) The method according to claim 24 comprising displaying sensor data from a sensor other than an image sensor substantially simultaneously as the frames from the in vivo image stream.

34. (Currently Amended) A system for displaying an in vivo image stream, the system comprising:
an in vivo imaging device to transmit an in vivo image stream;
a processor to compare at least one predetermined criterion of each of a plurality of frames generate a multi-frame image stream from the in vivo image stream to a reference image, to assign a score to each of a plurality of frames to be displayed substantially simultaneously based on a degree of variation of the predetermined criterion of each frame and the reference image, [[and]] to determine a spatial position of the frames to be displayed substantially simultaneously in the multi-frame image stream in order of ascending or descending degree of variation based on the score assigned thereto; and
a display to display [[said]] a multi-frame image stream, wherein each multi-frame image thereof displays the plurality of frames substantially simultaneously in the determined spatial position.

35. (Previously Presented) The system of claim 34 wherein the in vivo imaging device is an autonomous capsule.

36. (Previously Presented) The system of claim 34 comprising a pH sensor.

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37. **(Previously Presented)** The system of claim 34 wherein the score is assigned based on data detected by a sensor.

38. **(Previously Presented)** The system of claim 34 wherein the processor is to adjust the stream rate of the multi-frame image stream.

39. **(Currently Amended)** A method for displaying an in vivo image stream, the method comprising:

selecting a plurality of frames from an in vivo image stream;

comparing at least one predetermined criterion of each of the plurality of frames to a reference image;

assigning a score to each of the plurality of frames based on a degree of variation of the predetermined criterion of interest each frame and the reference image;

spatially positioning the plurality of frames in [[an]] order of ascending or descending degree of variation based on the score assigned thereto; and

displaying the plurality of frames substantially simultaneously according to the spatial positioning.

40. **(Cancelled)**

41. **(Cancelled)**

42. **(Previously Presented)** The method according to claim 39 wherein at least two of the plurality of frames are displayed having different sizes.

43. **(Currently Amended)** The method according to claim 39 wherein the score is assigned based on color variation ~~between~~ of the plurality of frames as compared to the reference image.

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44. **(Currently Amended)** The method according to claim ~~[[27]]~~ 24 wherein the reference image represents healthy tissue and wherein images having a high degree of variation with respect to the reference image are displayed to represent pathologies.

45. **(New)** The method according to claim 24 wherein the reference image represents a pathology and wherein images having a low degree of variation with respect to the reference image are displayed.